



## **RK5000PS-3U/RK5000-3U Rack Mount Chassis**



**For Fiber Optic Modules**

**C1972M (11/04)**



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# Important Safety Instructions

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1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the points where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases shall be placed on the apparatus.
16. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
17. Installation should be done only by qualified personnel and conform to all local codes.
18. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
19. Use only installation methods and materials capable of supporting four times the maximum specified load.
20. **CAUTION:** These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
21. Only use replacement parts recommended by Pelco.

The product and/or manual may bear the following marks:

 **WARNING:** This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit

 This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

<b>CAUTION:</b>
<b>RISK OF ELECTRIC SHOCK. DO NOT OPEN.</b>

# Regulatory Notices

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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## **RADIO AND TELEVISION INTERFERENCE**

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You may also find helpful the following booklet, prepared by the FCC: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402.

Changes and Modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission's rules.

# Description

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The RK5000PS-3U rack mount chassis supports fiber optic modules. The chassis has 12 slots and an internal double-width power supply. You can insert up to 12 single-width modules or a combination of single-width and double-width modules into the slots. For redundancy, you can use the optional external power supply (EPS5000-120). It provides redundant power for up to two fully populated RK5000PS-3U chassis. You can mount the chassis, which is 3 rack units (RU) high, into an EIA-standard, 19-inch rack.

The RK5000-3U chassis has 14 slots and requires an external power supply. You can insert up to 14 single-width modules or a combination of single-width and double-width modules into the slots. You can mount the chassis, which is 3 rack units (RU) high, into an EIA-standard, 19-inch rack. You can use the optional EPS5000-120 external power supply, which consists of dual 120 watt, hot swappable power supplies, to power up to two fully populated RK5000-3U chassis. The EPS5000-120 is 1 RU high and rack mountable.

You can fill the empty module slots on either chassis with single-width blank modules (RK5001B-3U) and double-width blank modules (RK50002B-3U).

## MODELS

RK5000PS-3U	Rack mountable chassis with power supply, 3 RU
RK5000-3U	Rack mountable chassis, 3 RU; external power supply required

## FRONT VIEW (RK5000PS-3U)

- 1 Rack Ears (2)
- 2 Power Supply
- 3 Module Slots (12)
- 4 Alarm from Module LED
- 5 Power Fail LED
- 6 Pelco Badge

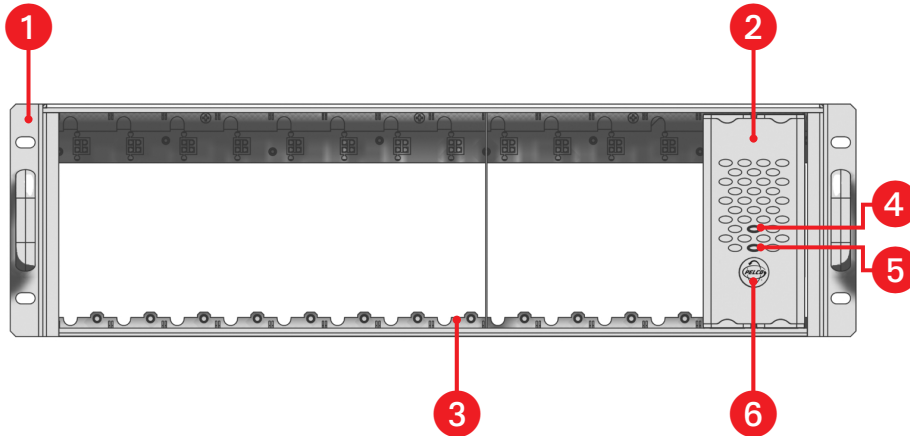


Figure 1. RK5000PS-3U Front View

## BACK VIEW (RK5000PS-3U)

- 1 Thumbscrews for Fastening Modules (12)
- 2 External Connector for Redundant Power Supply
- 3 Relay Output Connector with Screw Terminal
- 4 Power Button
- 5 Power Cord Connector

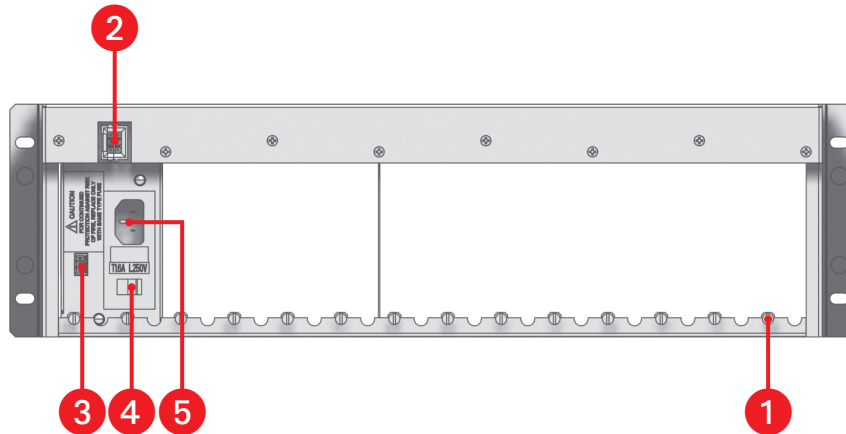


Figure 2. RK5000PS-3U Back View



### FRONT VIEW (RK5000-3U)

- 1 Rack Ears (2)
- 2 Module Slots (14)

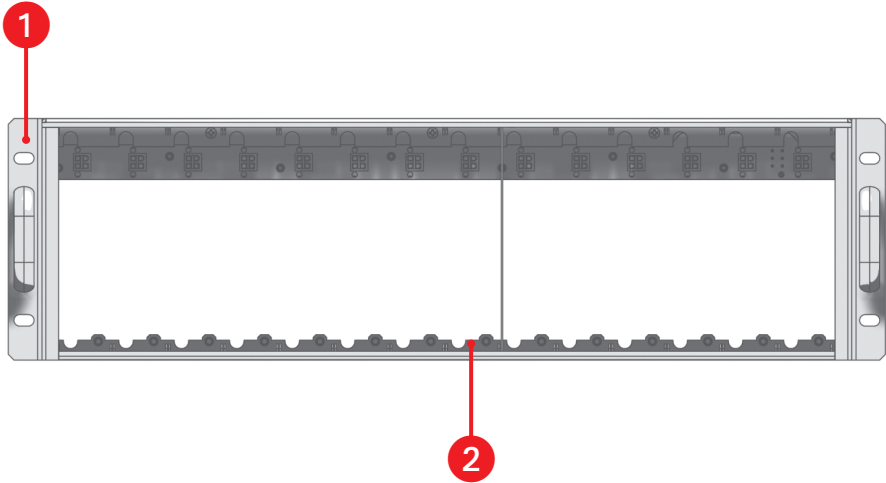


Figure 3. RK5000-3U Front View

### BACK VIEW (RK5000-3U)

- 1 External Connector for Redundant Power Supply
- 2 Thumbscrews for Fastening Modules (14)

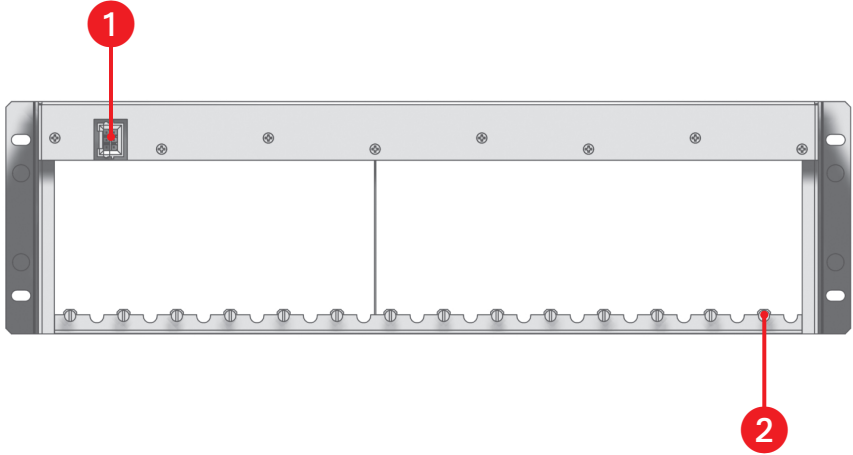


Figure 4. RK5000-3U Back View

# Installation

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## PACKAGE CONTENTS

### **RK5000PS-3U**

- 1 Rack mount chassis
- 4 Screws and washers for rack mounting

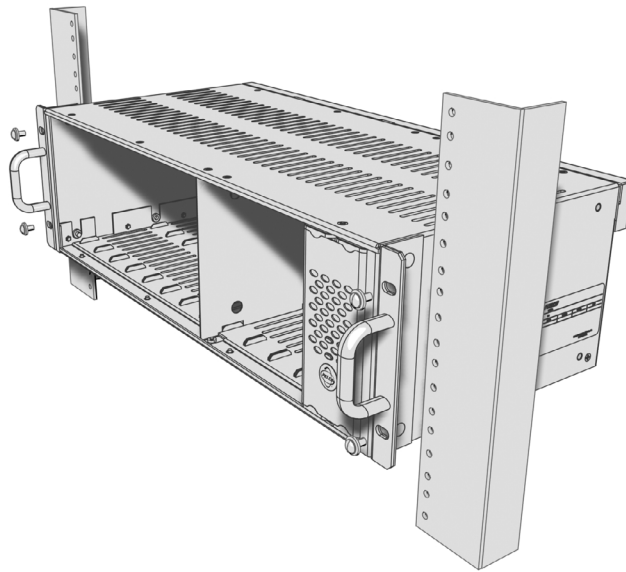
### **RK5000-3U**

- 1 Rack mount chassis
- 4 Screws and washers for rack mounting

## MOUNTING A CHASSIS

The procedure for mounting an RK5000PS-3U and an RK5000-3U into a rack is exactly the same. To mount a chassis, follow these steps and refer to Figure 5.

1. Insert the chassis into the rack.
2. Secure the chassis with the supplied screws and washers.



**Figure 5.** Mounting an RK5000PS-3U/RK5000-3U into a Rack

## INSTALLING A MODULE

You can install single-width or double-width modules into the empty slots on the RK5000PS-3U chassis and RK5000-3U chassis. To install a module, follow these steps and refer to Figure 6.

1. Insert the module into an empty slot of the chassis.
2. Secure the module by tightening the thumbscrew on the back of the chassis.

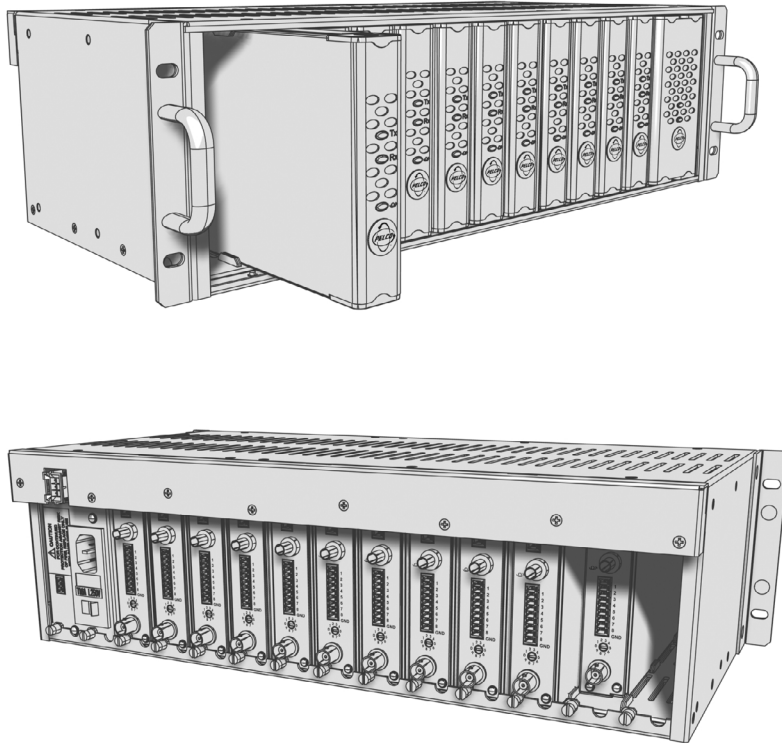


Figure 6. Module Installation

## INSTALLING A BLANK MODULE

You can use single-width or double-width blank modules to fill the empty module slots on the chassis. To attach a blank module, follow these steps and refer to Figure 7.

1. Insert the blank module into the empty slot on the chassis.
2. Secure the blank module by tightening the thumbscrew on the back of the chassis.

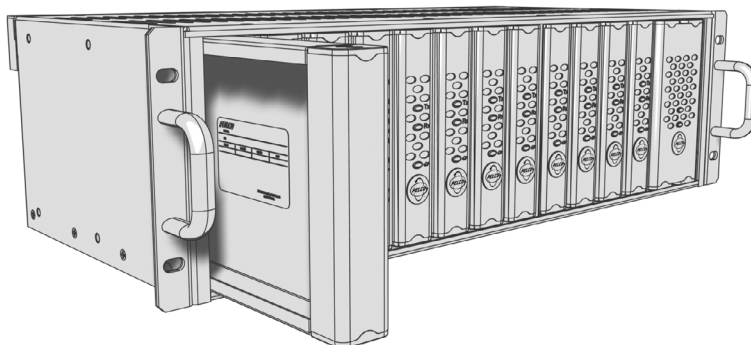


Figure 7. Blank Module Installation

# Service

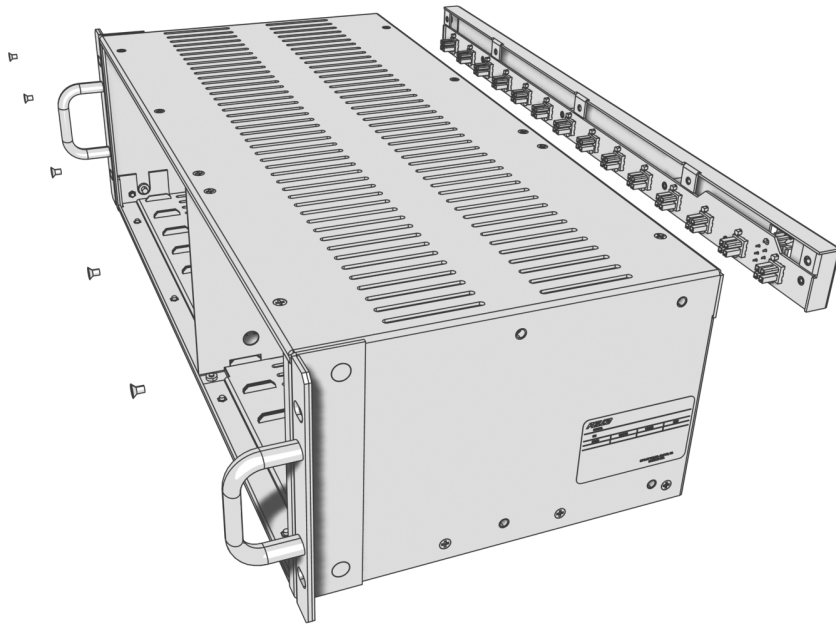
## REMOVING THE POWER BUS

You must remove the power bus from the RK5000PS-3U if you want to use the power supplies that are provided with the Fiber modules.

**⚠ WARNING:** Using the power supplies that are provided with the Fiber modules with the power bus on the RK5000PS-3U can cause damage to the unit.

To remove the power bus, follow these steps and refer to Figure 8.

1. Turn off the power supply.
2. Remove the power supply.
3. Unscrew the five Phillips flat head screws.

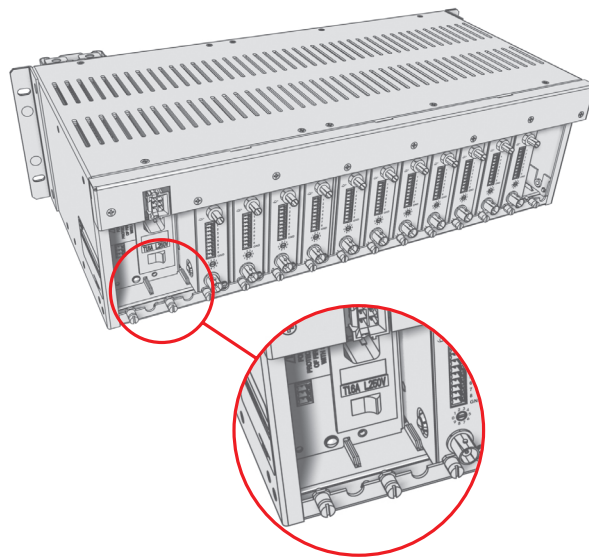


**Figure 8.** Power Bus Removal

## REPLACING AN INTERNAL POWER SUPPLY

You can easily replace the internal power supply in the RK5000PS-3U in case of failure. The front of the power supply has two LEDs. The top LED turns red when there is an alarm condition from one of the modules. The bottom LED turns red when the power supply fails. To replace an internal power supply, follow these steps and refer to Figure 9.

1. Unplug the power cord.
2. Unscrew the two thumbscrews on the back of the chassis that hold the power supply.
3. Remove the power supply.
4. Insert the new power supply.
5. Secure the power supply by tightening the two thumbscrews on the back of the chassis.
6. Plug in the power cord.
7. Turn on the power supply.



**Figure 9.** Internal Power Supply Replacement

# Specifications

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## **RK5000PS-3U**

### **ELECTRICAL**

Input Voltage	100-240 VAC
Output Voltage	12 VDC
Power Consumption	120 watts maximum
Fuse	1.6 A
Redundant Capability	Yes with optional EPS5000-120 power supply

### **MECHANICAL**

Number of Slots	12 for modules and 2 for power supply
Module Orientation	Vertical
Rack Units	3
Construction	Aluminum
Finish	Black

### **GENERAL**

Operating Temperature	32° to 122°F (0° to 50°C)
Operating Humidity	80% maximum relative humidity, noncondensing
Storage Humidity	95% maximum relative humidity, noncondensing
Dimensions	5.22" H x 18.99" W x 8.85" D (13.26 x 48.23 x 22.48 cm)
Mounting	Fits 19-inch, EIA-standard rack
Unit Weight	8.01 lb (3.63 kg), with power supply 25.53 lb (11.58 kg), fully populated

## **RK5000-3U**

### **MECHANICAL**

Number of Slots	14 for modules
Module Orientation	Vertical
Rack Units	3
Construction	Aluminum
Finish	Black

### **GENERAL**

Dimensions	5.22" H x 18.99" W x 8.85" D (13.26 x 48.23 x 22.48 cm)
Mounting	Fits 19-inch, EIA-standard rack
Unit Weight	5.19 lb (2.35 kg), chassis only 25.63 lb (11.63 kg), fully populated

## PRODUCT WARRANTY AND RETURN INFORMATION

### WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship **for a period of one year** after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on FT/FR8000 Series fiber optic products and the following fixed camera models: CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and CC3651H-2X.
- Three years on all other fixed camera models (including Camclosure® Integrated Camera Systems) and Genex® Series (multiplexers, server, and keyboard).
- Two years on all standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM8500/CM9500/CM9700 Series Matrix, DF5 and DF8 Series Fixed Dome products.
- Two years on Spectra®, Esprit®, and PS20 Scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 Series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders and NVR300 Series network video recorders, and all Endura™ Series distributed network based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

### RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair).

All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid. Ship to the appropriate address below.

*If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:*

Service Department  
Pelco  
3500 Pelco Way  
Clovis, CA 93612-5699

*If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:*

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco  
3500 Pelco Way  
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors  
473 Eccles Avenue  
South San Francisco, CA 94080 USA  
Phone: 650-737-1700  
Fax: 650-737-0933

### REVISION HISTORY

Manual #	Date	Comments
C1972M	11/04	Original version.



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